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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/995,963	11/28/2001	Azeem Ahmad	13793RRUS02U	9223

7590 08/03/2004

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EXAMINER	
D AGOSTA, STEPHEN M	

ART UNIT	PAPER NUMBER
2683	5

DATE MAILED: 08/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/995,963	AHMAD ET AL.	
	Examiner	Art Unit	
	Stephen M. D'Agosta	2683	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-20 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-20 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on 28 November 2001 is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 4.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Oath/Declaration

The Oath/Declaration does not state a claim to the provisional application per 35 U.S.C. 119 (e). A new oath, declaration or application data sheet is required in the body of which the present application should be identified by application number and filing date.

Priority

The priority to provisional application 60/253,436 will be granted when a new oath/declaration is received.

Information Disclosure Statement

The information disclosure statement (IDS) submitted on 3-28-03 is in compliance and accordingly, the information disclosure statement is being considered by the examiner.

Drawings

The drawings were received on 11-28-01 and have been reviewed by the draftsperson and examiner.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-2, 4-5, 8-10, 12-16 and 19-20 rejected under 35 U.S.C. 103(a) as being unpatentable over Gilchrist et al. US 5,745,695 and further in view of Hays WO95-26113 (hereafter Gilchrist and Hays).

As per **claim 1**, Gilchrist teaches an access network controller (eg. SGSN), comprising:

A processor (the SGSN is a computer/server that supports mobile data communications and inherently comprises a processor);

Communication circuitry within the access network controller (figures 1-2 show the SGSN communicating with the BSS and mobile which inherently requires communication circuitry);

A memory for storing computer instructions that define operational logic relating to a response of the access network controller to a received signal/message (Gilchrist teaches in figures 1-2 a message/signal being sent between the mobile/BSS to the SGSN and vice versa which reads on the claim. The SGSN has a processor which inherently comprises a memory. Figure 4 also shows a Paging Request #201/#202 and Gilchrist also discloses logic that would be used when the mobile is busy, ie. bar all incoming calls, call forward, etc. C4, L9-17); and

A network port for enabling the access network controller to communicate with external systems (figures 1-2 show the SGSN communicating with external systems, ie. the BSS and mobile. The SGSN ultimately provides connectivity from the mobile to a data network computer/server which can be considered an external network as well));

But is silent on a pseudo-paging signal.

While Gilchrist does teaches a message/signal (eg. page) being sent between mobile/BSS and SGSN (figures 1-2) the examiner puts forth **Hays** who teaches data transmission in a mixed mobile cellular/paging radio system (title) whereby the system can identify a mobile user as a hybrid phone/pager device and subsequently can send a data message via voice channel and/or pager channel which reads on determining whether the mobile is a hybrid station (abstract and Summary of Invention pages 2-4).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Gilchrist, such that a pseudo-paging signal is used, to provide means for the network to transmit pages via both data/page and voice channels.

As per **claim 2**, Gilchrist in view of Hays teaches claim 1 **but is silent on** wherein the memory further includes computer instructions that define profile information for at least one hybrid mobile station.

Gilchrist does teach the mobile notifying the cellular system as to how it should proceed when the mobile is busy (ie. bar all incoming calls, call forwarding, etc., C4, L9-17). While the examiner does not consider this notification as defining a profile, the system is storing the instructions in memory. The examiner also notes that an HLR would store a user's profile and would be accessed by the SGSN to determine how to proceed when the mobile is busy with another call.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Gilchrist in view of Hays, such that the memory includes instructions to define profile information for at least one hybrid mobile station, to provide means for identifying a hybrid so that the system can page it on both voice/page/data channels.

As per **claim 4**, Gilchrist in view of Hays teaches claim 2 **but is silent on** wherein the computer instructions that define profile information specify that the access network controller is to generate a response to a BTS to advise it that the hybrid mobile has been paged and is being directed to receive pages from the voice network.

Hays teaches data transmission in a mixed mobile cellular/paging radio system (title) whereby the system can identify a mobile user as a hybrid phone/pager device and subsequently can send a data message via voice channel and/or pager channel which reads on determining whether the mobile is a hybrid station (abstract and Summary of Invention pages 2-4).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Gilchrist in view of Hays, such that the computer instructions that define profile information specify that the access network controller is to generate a response to a BTS to advise it that the hybrid mobile has been paged and is being directed to receive pages from the voice network, to provide means for the mobile to receive pages from the voice network and/or from the data/pager network depending upon if the mobile is engaged in a call.

As per **claim 5**, Gilchrist in view of Hays teaches claim 2 wherein the computer instructions that define profile information specify that the access network controller is to generate a response to a BTS to advise it that the hybrid mobile is present but not available for a voice call (C4, L9-16 teaches when the mobile is in data/GPRS mode, it can have the voice network informed that it is barring all calls, call forwarding, etc., which reads on the claim).

As per **claim 8**, Gilchrist teaches a method in a communication network (title) comprising:

Receiving a signal/message transmitted by a BTS in a specified interface signal between BTS and access network controller (eg. SGSN) [figures 1-2 show a message/page sent from mobile/BTS/BSS to SGSN for suspending/resuming data flow]; and

Generating a corresponding response (figures 1-2 shows the SGSN responding with a message based on the message from the mobile/BTS, note direction of arrows on #21 and #29 in figures 1 and 2 respectively).

But is silent on a pseudo-paging signal.

While Gilchrist does teaches a message/signal (eg. page) being sent between mobile/BSS and SGSN (figures 1-2) the examiner puts forth **Hays** who teaches data transmission in a mixed mobile cellular/paging radio system (title) whereby the system can identify a mobile user as a hybrid phone/pager device and subsequently can send a data message via voice channel and/or pager channel which reads on determining whether the mobile is a hybrid station (abstract and Summary of Invention pages 2-4).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Gilchrist, such that a pseudo-paging signal is used, to provide means for the network to transmit pages via both data/page and voice channels.

As per **claim 9**, Gilchrist in view of Hays teaches claim 8 wherein the response includes commanding a hybrid mobile to redirect and to suspend a data call so that it may receive and respond to paging signals transmitted by a BTS (figures 1-2 show the mobile/BTS informing the SGSN to suspend data transmission so that it may connect to the MSC/HLR/VLR, also see C4, L9-16 which teaches barring/forwarding voice calls, but one skilled would be able to perform this same service when engaged in a voice call, eg. bar/forward data calls).

As per **claim 10**, Gilchrist in view of Hays teaches claim 9 wherein the response includes waiting long enough to enable the hybrid mobile station to switch from the data network to the voice network and then advising the BTS that the hybrid mobile is presently available (Gilchrist does disclose receiving a non-data/GPRS page while engaged in a data/GPRS call, C4, L22-28 – hence the phone would either bar, forward or accept the call/page).

As per **claims 12-14**, Gilchrist in view of Hays teaches claim 8 **but is silent on** wherein the response includes advising the BTS that the hybrid mobile is not present OR present but not available OR present and available.

Gilchrist teaches informing the network/caller to bar, forward and/or user is busy (C4, L9-16). One skilled would also include that the hybrid is not present OR present but not available OR present and available (eg. either the call goes to voicemail and/or a special message stating the user is not in the service provider's coverage area, eg. has traveled internationally, etc. AND/OR the call goes through if present and available).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Gilchrist in view of Hays, such that the response includes advising the BTS that the hybrid mobile is not present OR present but not available OR present and available, to provide means for sending feedback to the network/caller that the user is not present/unavailable/available and/or for providing means for the hybrid user to configure multiple responses based upon their current location/usage/etc

As per **claim 15**, Gilchrist teaches a method in a BTS for routing or setting up a call (figures 1-2 show a BTS/BSS which will route/setup data/voice calls from the SGSN or MSC) **but is silent on** comprising:

Examining a permanent ID of a mobile station for which a voice call is to be set up; and

Determining whether the mobile station is a hybrid mobile station.

Hays teaches data transmission in a mixed mobile cellular/paging radio system (title) whereby the system can identify a mobile user as a hybrid phone/pager device and subsequently can send a data message via voice channel and/or pager channel which reads on determining whether the mobile is a hybrid station (abstract and Summary of Invention pages 2-4). The examiner notes that the system will need to identify the mobile as being a hybrid and one skilled would use the phone number (eg. permanent ID) to identify such a hybrid phone.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Gilchrist, such that a permanent ID is used to determine if the mobile is a hybrid, to provide means for the network to identify the mobile device and understand if it can receive both data and voice calls/pages.

As per **claim 16**, Gilchrist in view of Hays teaches claim 15 includes the step of generating a pseudo-page that is to be transmitted to an access network controller (eg. SGSN) [see figures 1-2 which shows message/signal/page being sent between mobile/BSS and SGSN).

As per **claim 19**, Gilchrist in view of Hays teaches claim 15 further including the step of receiving a response to a previously transmitted pseudo-page and communicating with a MSC to forward the call to voice mail (C4, L9-16 teaches call forwarding, eg. to voicemail as is known in the art when the callee is using the phone).

As per **claim 20**, Gilchrist in view of Hays teaches claim 15 **but is silent on** further including the step of receiving a response to previously transmitted pseudo-page and communicating with the MSC to advise it that the hybrid is not present.

Gilchrist teaches informing the network/caller to bar, forward and/or user is busy (C4, L9-16). One skilled would also include that the hybrid is not present (eg. either the call goes to voicemail and/or a special message stating the user is not in the service provider's coverage area, eg. has traveled internationally, etc. AND/OR the call goes through if present and available).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Gilchrist in view of Hays, such that receiving a response to previously transmitted pseudo-page and communicating with the MSC to advise it that the hybrid is not present, to provide means for sending feedback to the network/caller that the user is unavailable and/or for providing means for the hybrid user to configure multiple responses based upon their current location/usage/etc.

Claim 3 rejected under 35 U.S.C. 103(a) as being unpatentable over Gilchrist and Hays as applied to claim 2 and further in view of Kari WO97-26764 (hereafter Kari).

As per **claim 3**, Gilchrist in view of Hays teaches claim 2 **but is silent on** wherein the computer instructions that define profile information specify that the access network controller is to generate a response to a BTS to advise it that the HMS is unavailable.

Kari teaches a hybrid mobile supporting both voice and data communications whereby the system can determine if the mobile is involved in a voice or data call and signal the other service to hold, call forward, end call and connect to other service, etc. (abstract, figure 1 and each independent claim).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Gilchrist in view of Hays, such that the computer instructions that define profile information specify that the access network controller is to

generate a response to a BTS to advise it that the HMS is unavailable, to provide means for the system to automatically obtain call-handling procedures stored in the network as configured by the mobile user.

Claim 6-7, 11 and 17-18 rejected under 35 U.S.C. 103(a) as being unpatentable over Gilchrist and Hays as applied to claim 2 and further in view of Kari WO97-26764 (hereafter Kari).

As per **claims 6-7**, Gilchrist in view of Hays teaches claim 1 wherein the memory includes instructions that define logic for forwarding a voice call (C4, L9-16) **but is silent on** to an Internet Call Delivery/Waiting Server.

Shtivelman teaches Internet call waiting (title) and use of a cellular phone in the application of call waiting In alternative embodiments, additional functionality may be built in to the client's application, such as an ability to handle more than one call at a time, presenting the client with separate icons or other indicia for each call, including caller ID. The client may select to return pre-recorded messages as well, such as "Thank you for the call. I'm on an Internet session. Please call back after 4:00 PM." In another alternative the client may select to take the call as a PSTN call, and end the Internet session, at which time the system forwards the call to the client as a PSTN call to telephone 111. In yet another embodiment of the invention the client may elect to continue the Internet session, but to have the incoming call forwarded to a conventional (not Internet protocol) telephone number, such as a cellular telephone which the client may have nearby, or another telephone set in the same premises. In this embodiment the system is adapted to redirect the incoming call according to the recipient's selection. In this embodiment the client mat set his/her routing rules in subscribing to the service to have incoming calls during browsing sessions redirected to a cell phone number, an alternate telephone at or near his/her premises, or to some other destination. Alternatively the client may select a forwarding after being alerted to an incoming call (C5,L57 to C6, L13).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Gilchrist in view of Hays, such that the call is forwarded to an ICDS/ICWS server, to provide means for transferring/forwarding a call when the user is already engaged in a call and does not want to take the new call.

As per **claim 11**, Gilchrist in view of Hays teaches claim 8 **but is silent on** wherein the response includes forwarding the call to an Internet call waiting server.

Shtivelman teaches Internet call waiting (title) and use of a cellular phone in the application of call waiting In alternative embodiments, additional functionality may be built in to the client's application, such as an ability to handle more than one call at a time, presenting the client with separate icons or other indicia for each call, including caller ID. The client may select to return pre-recorded messages as well, such as "Thank you for the call. I'm on an Internet session. Please call back after 4:00 PM." In another alternative the client may select to take the call as a PSTN call, and end the Internet session, at which time the system forwards the call to the client as a PSTN call to telephone 111. In yet another embodiment of the invention the client may elect to continue the Internet session, but to have the incoming call forwarded to a conventional (not Internet protocol) telephone number, such as a cellular telephone which the client may have nearby, or another telephone set in the same premises. In this embodiment the system is adapted to redirect the incoming call according to the recipient's selection. In this embodiment the client mat set his/her routing rules in subscribing to the service to have incoming calls during browsing sessions redirected to a cell phone number, an alternate telephone at or near his/her premises, or to some other destination. Alternatively the client may select a forwarding after being alerted to an incoming call (C5,L57 to C6, L13).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Gilchrist in view of Hays, such that the call is forwarded to an ICWS server, to provide means for transferring/forwarding a call when the user is already engaged in a call and does not want to take the new call.

As per **claims 17-18**, Gilchrist in view of Hays teaches claim 15 wherein the memory includes instructions that define logic for forwarding a voice call (C4, L9-16) **but is silent on** to an Internet Call Delivery/Waiting Server.

Shtivelman teaches Internet call waiting (title) and use of a cellular phone in the application of call waiting - In alternative embodiments, additional functionality may be built in to the client's application, such as an ability to handle more than one call at a time, presenting the client with separate icons or other indicia for each call, including caller ID. The client may select to return pre-recorded messages as well, such as "Thank you for the call. I'm on an Internet session. Please call back after 4:00 PM." In another alternative the client may select to take the call as a PSTN call, and end the Internet session, at which time the system forwards the call to the client as a PSTN call to telephone 111. In yet another embodiment of the invention the client may elect to continue the Internet session, but to have the incoming call forwarded to a conventional (not Internet protocol) telephone number, such as a cellular telephone which the client may have nearby, or another telephone set in the same premises. In this embodiment the system is adapted to redirect the incoming call according to the recipient's selection. In this embodiment the client mat set his/her routing rules in subscribing to the service to have incoming calls during browsing sessions redirected to a cell phone number, an alternate telephone at or near his/her premises, or to some other destination. Alternatively the client may select a forwarding after being alerted to an incoming call (C5,L57 to C6, L13).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Gilchrist in view of Hays, such that the call is forwarded to an ICDS/ICWS server, to provide means for transferring/forwarding a call when the user is already engaged in a call and does not want to take the new call.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

1. O'horo et al. US 5,519,767
2. Lin US 5,287,401
3. Newlin et al. US 6,011,909
4. Nishiara US 6,289,092

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen M. D'Agosta whose telephone number is 703-306-5426. The examiner can normally be reached on M-F, 8am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bill Trost can be reached on 703-308-5318. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Stephen D'Agosta